THAT WHICH IS CLAIMED:

1. A reinforced panel, comprising:

a face sheet having an interior side and an exterior side;

a plurality of integral and intersecting ribs having distal ends and projecting from the interior side of the face sheet to form contiguous cells, the ribs defining at least one channel extending across a plurality of contiguous cells; and

a reinforcing member positioned in the at least one channel and secured thereto for increasing bending resistance of the panel.

2. A panel according to Claim 1, wherein the reinforcing member has a cross-sectional shape selected from the group consisting of polygonal, circular, oval, and elliptical.

3. A panel according to Claim 1, wherein the reinforcing member has a cross-sectional shape selected from the group consisting of "T" shaped, "I" shaped, "V" shaped, "|" shaped, and "L" shaped.

4. A panel according to Claim 3, wherein the reinforcing member has a top end that is flush with the distal ends of the ribs.

5. A panel according to Claim 1, wherein the reinforcing member is secured to the channel by one of the group consisting of dry bond lamination, adhesive, snap-fit, and frictional fit.

6. A panel according to Claim 1, wherein at least one of the contiguous cells has a cross-sectional shape selected from the group consisting of round, elliptical, oval, and polygonal.

7. A panel according to Claim 1, wherein at least the face sheet, reinforcing member, and ribs are formed from papermaking fibers.

8. A panel according to Claim 1, further comprising a planar sheet attached at least to the distal ends of the intersecting ribs.

9. A panel according to Claim 1, wherein the face sheet and the ribs are formed from molded fibers.

10. A reinforced panel, comprising:

a first face sheet having an interior side and an exterior side;

a plurality of first integral and intersecting ribs having distal ends and projecting from the interior side of the first face sheet to form contiguous cells;

a second face sheet having an interior side and an exterior side;

a plurality of second integral and intersecting ribs having distal ends and projecting from the interior side of the second face sheet to form contiguous cells, at least one of the first and second ribs defining at least one channel extending across a plurality of contiguous cells; and

at least one reinforcing member positioned in the at least one channel and secured thereto for increasing bending resistance of the panel.

11. A panel according to Claim 10, wherein the at least one reinforcing member has a cross-sectional shape selected from the group consisting of polygonal, circular, oval, and elliptical.

12. A panel according to Claim 10, wherein the at least one reinforcing member has a cross-sectional shape selected from the group consisting of "T" shaped, "I" shaped, "V" shaped, " | " shaped, and "L" shaped.

13. A panel according to Claim 12, wherein the first ribs define a first channel and the second ribs define a second channel, and wherein the at least one reinforcing member includes a first reinforcing member and a second reinforcing member, the first

reinforcing member being is positioned at least partially in the first channel, and the second reinforcing member being positioned at least partially in the second channel.

14. A panel according to Claim 13, wherein the first reinforcing member has an end that is flush with the distal ends of the first ribs, and wherein the second reinforcing member has an end that is flush with the distal ends of the second ribs.

15. A panel according to Claim 10, wherein the at least one reinforcing member is secured to the channel by one of the group consisting of dry bond lamination, adhesive, snap-fit, and frictional fit.

16. A panel according to Claim 10, wherein at least one of the first ribs and second ribs forms at least one contiguous cell having a cross-sectional shape selected from the group consisting of round, elliptical, oval, and polygonal.

17. A panel according to Claim 10, wherein at least one of the face sheets and at least one of the ribs are formed from paperboard material.

18. A panel according to Claim 10, further comprising a planar sheet attached at least to the distal ends of the intersecting ribs.

19. A panel according to Claim 10, wherein at least one of the first and second reinforcing members is made from at least one of the materials selected from the group consisting of paperboard, wood, metal, and plastic.

20. A panel according to Claim 10, wherein at least one of the first and second face sheets is formed of molded fibers.

21. A method of forming a reinforced panel, comprising:

forming a first face sheet having a plurality of integral ribs extending therefrom, the ribs having distal ends and forming contiguous cells;

forming a first channel in the first face sheet that extends across a plurality of contiguous cells; and

securing a first reinforcing member in the first channel for increasing the bending resistance of the panel.

22. A method according to Claim 21, wherein the channel forming step and the face sheet forming step occur concurrently.

23. A method according to Claim 21, wherein the channel forming step includes cutting the first face sheet to define the first channel.

24. A method according to Claim 21, wherein the channel forming step includes molding the first face sheet to define the first channel.

25. A method according to Claim 21, wherein the securing step includes securing the first reinforcing member in the first channel by one of the group consisting of dry bond laminating, adhering with an adhesive, snapping in place, and pressing into a frictional fit.

26. A method according to Claim 21, wherein the securing step includes securing the first reinforcing member in the first channel whereby a portion of the first reinforcing member extends beyond the distal ends of the integral ribs.

27. A method according to Claim 21, wherein the securing step includes securing the first reinforcing member in the first channel whereby the first reinforcing member is flush with the distal ends of the integral ribs.

28. A method according to Claim 21, further comprising:

forming a second face sheet having a plurality of integral ribs extending therefrom, the ribs having distal ends and forming contiguous cells;

forming a second channel in the second face sheet that extends across a plurality of contiguous cells;

securing at least one of the first reinforcing member and a second reinforcing member in the second channel; and

attaching the first face sheet to the second face sheet.

29. A method according to Claim 28, wherein the attaching step includes aligning and securing the distal ends of the ribs of the first face sheet and the distal ends of the ribs of the second face sheet to define at least one complete contiguous cell therebetween.

30. A method according to Claim 28, wherein securing at least one of the first and second reinforcing members in the second channel includes securing a second reinforcing member in the second channel, and wherein the attaching step includes positioning the first and reinforcing members against one another.

31. A method according to Claim 28, wherein securing at least one of the first and second reinforcing members in the second channel includes securing the first reinforcing member in the second channel.

32. A reinforced panel, comprising:

at least one face sheet having an interior side and an exterior side, the at least one face sheet being arranged such that the exterior side defines a channel;

a plurality of integral and intersecting ribs having distal ends and projecting from the interior side of the at least one face sheet to form contiguous cells; and

a reinforcing member positioned in the channel and secured thereto for increasing the bending resistance of the panel.

33. A panel according to Claim 32, wherein the at least one face sheet includes a first face sheet and a second face sheet, each sheet having a plurality of

integral and intersecting ribs, and arranged so that the ribs of each sheet are proximate the ribs of the other sheet.

34. A panel according to Claim 32, wherein the channel extends into the exterior side of the face sheet towards the distal ends of the ribs.

35. A panel according to Claim 32, wherein the reinforcing member and the channel have cooperating cross-sectional shapes.

36. A panel according to Claim 32, wherein the at least one face sheet and the plurality of ribs are formed of molded fibers.